Facility Well Name Northern (Cunningham) WIW #3 **UIC Permit #** KS-05-151-003 **Month** October **Year** 2023

Submitted 11/02/2023 **Approved** 11/28/2023 **KOLAR Document ID** 1735650

Class I-V Injection Well Monthly Monitoring

Summary of Monthly Report

Number of days injection occurred: 5

Barrels per Day Maximum: 4,000

			Annulus Pressure psig min 60		Injection Pressure		
	Injection Volume Barrels per Day	Injection Rate Barrels per Minute	Gauge psig	Cont. Record psig	Gauge psig	Cont. Record psig	Amount Added to Seal Pot
Monthly Average	7	0.04	104	103	-22.5	-23.5	0
Monthly Maximum	60	0.33	107	108	-13.0	-22.0	0
Monthly Minimum	0	0.00	98	95	-25.0	-25.0	0
Monthly Total	216						0

Summary of Continuous Recorder Data

Maximum Annulus Pressure psig	Minimum Annulus Pressure psig	Maximum Injection Pressure psig	Minimum Injection Pressure psig
110.80	94.47	-14.88	-29.36

Comments:

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Daily Recorder Data

Day	Time 24 hr	Injection Volume Barrels Per Day	Injection Rate Barrels Per Minute	Annulus Pressure (Gauge) psig	Annulus Pressure (Continuous Recorder) psig	Injection Pressure (Gauge) + / -	Injection Pressure (Continuous Recorder) + / -	Seal Pot Fluid Level inches	Type of Fluid Added to Seal Pot	Amount of Fluid Added to Seal Pot gallons	Initials of Collector of Field Recordings		
1	09:22	0.00	0.00	107	106.7	-23	-23.0	17		0	HS		
2	10:40	48.05	0.24	102	101.0	-23	-23.0	15		0	DV		
3	11:00	30.36	0.33	105	106.0	-25	-24.0	17		0	AB		
4	13:30	0.00	0.00	105	105.4	-24	-24.0	17		0	AB		
5	09:00	0.00	0.00	105	103.8	-23	-24.0	17		0	AB		
6	08:35	0.00	0.00	105	104.1	-22	-24.0	17		0	DV		
7	08:00	0.00	0.00	104	100.4	-21	-24.0	17		0	DV		
8	08:05	0.00	0.00	105	102.8	-22	-23.0	17		0	DV		
9	09:32	60.21	0.31	105	104.2	-23	-23.0	17		0	JCJ		
10	09:41	0.00	0.00	103	102.6	-22	-23.0	16		0	JCJ		
11	09:15	0.00	0.00	105	105.4	-23	-23.0	17		0	JCJ		
12	13:16	0.00	0.00	106	107.5	-24	-23.0	17		0	JCJ		
13	09:00	0.00	0.00	105	102.4	-23	-24.0	17		0	JCJ		
14	10:00	0.00	0.00	104	102.2	-23	-23.0	17		0	CWA		
15	09:45	0.00	0.00	105	102.1	-22	-24.0	17		0	JCJ		
16	11:02	50.52	0.10	98	94.5	-13	-24.0	14		0	JWM		
17	10:17	0.00	0.00	100	101.4	-22	-23.0	16		0	JWM		
18	09:52	0.00	0.00	105	103.8	-22	-23.0	17		0	JWM		
19	09:34	0.00	0.00	105	103.1	-22	-23.0	17		0	JWM		
20	08:56	0.00	0.00	105	104.0	-22	-23.0	17		0	JWM		
21	09:31	0.00	0.00	105	105.0	-23	-23.0	17		0	JWM		
22	13:08	0.00	0.00	105	106.6	-23	-22.0	17		0	GKB		
23	11:03	0.00	0.12	100	100.0	-23	-23.0	15		0	GKB		
24	08:50	0.00	0.00	105	105.0	-24	-23.0	16		0	DMH		
25	08:15	0.00	0.00	105	106.2	-24	-25.0	17		0	DMH		
26	09:30	0.00	0.00	106	106.2	-24	-24.0	17		0	DMH		
27	09:30	0.00	0.00	104	103.7	-25	-23.0	17		0	DMH		
28	11:40	0.00	0.00	103	100.0	-21	-24.0	17		0	GKB		
29	13:06	0.00	0.00	100	98.5	-22	-25.0	17		0	GKB		
30	12:35	27.05	0.12	100	99.0	-22	-25.0	17		0	GKB		
31	09:15	0.00	0.00	105	104.5	-22	-25.0	17		0	HS		

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Weekly Injectate Samples

Kansas Lab Certificate Number E-10146

Week	**Temperature**		**pH**		**Chloride**				
	Degrees Fahrenheit	Date	Standard Units	Date	Cl concentration (mg/l)	Date Sample Collected	Date Sampl Analysed		
1	73.00	10/02/2023	6.53	10/02/2023	N/A				
2	67.00	10/09/2023	6.79	10/09/2023	N/A				
3	62.00	10/16/2023	6.55	10/16/2023	N/A				
4	74.00	10/23/2023	6.63	10/23/2023	N/A				
5	65.00	10/30/2023	6.89	10/30/2023	N/A				

No monthly injectate samples required.

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Quarterly Injectate Samples

Quarter 4
Date Sample Collected 10/03/2023
Kansas Lab Certificate Number E-10146
Lab Name Pace Analytical-Salina

These samples shall be representative of injection activity and shall therefore be collected on days of injection.

Constituent	Value	Units
Calcium	2,110.000	mg/l
Chloride	23,200.000	mg/l
Conductivity	77.100	Mmhos
Magnesium	488.000	mg/l
Sodium	15,660.000	mg/l
Sulfate	2,350.000	mg/l
Total Alkalinity as CaCO3	336.000	mg/l
Total Dissolved Solids	54,000.000	mg/l
Total Suspended Solids	40.500	mg/l